THE SENTINEL
OFFICIAL SAFETY NEWSLETTER OF CIVIL AIR PATROL

Don't Let Your Wallet Affect Your Judgment

Being frugal is a good thing—right up to the point where it can impact the health of you or others. How many times have you seen people riding around on bald tires? Add a wet road and someone can get killed. Carpenters know that a dull saw blade can not only be inefficient, it can be extremely dangerous. Both of these examples have the same theme - money needs to be spent to mitigate risk. Frugality does not include risking health or safety in the name of saving money.

This year, however, frugality may have passed this limit and contributed to the deaths of three of our members. Last November, a California Wing crew flew a member-furnished aircraft from Big Bear City to a SAREX in Palm Springs. While inbound to the mission base, the crew reported turbulence so rough in the mountain pass that their heads were striking the ceiling of the aircraft. Later that evening, there was discussion of canceling the next day's flying because of the discouraging wind forecast for that night and into the following day. Billeting for those attending the 3-day SAREX had been arranged at a local hotel. The mishap crew however, disappointed that there might not be any flying the next day due to the high winds, elected to fly home that night - even though several people tried to convince them to stay. Both were killed that night around 2200 PST when they crashed on Tip Top Mountain at 6,900' msl. What motivated this crew to go home in these conditions? Could part of it have been the cost of the hotel room?

In April, we had another fatality when three Arizona members decided to drive straight-through to Illinois to return a hot air balloon that they had borrowed for the winter. The three took turns at the wheel until early the next morning, when according to Missouri State Highway Patrol, the driver fell asleep at the wheel, drove off the highway and rolled the vehicle. Why did they drive straight-through? Could it have been to save the cost of hotel rooms?

Accidents sometimes involve "skimping" (giving insufficient or barely sufficient attention, effort or funds). **Skimping in health and safety issues is just asking for trouble**. Whether you're trying to get a few more miles out of your tires or stretching your fuel to get to a destination - it will eventually catch up to you. It reminds me of the ad where the auto mechanic is trying to sell an oil change to a skimping customer by saying "you can pay me now or pay me later."

When it comes to your safety - "pay it now" - you're worth it!

Coping With Summer Heat

Considering the number of summer activities that our members are involved in, our organization has a high exposure to the dangers of heat illness. For this reason, let's examine the recognition, treatment and prevention of several heat-associated illnesses. First, we should know how the body cools itself when it gets hot. Two things happen – increased blood flow to the skin and evaporation of sweat (water and sodium). Both of these physiological responses require proper hydration. Sweating additionally requires electrolyte replacement, principally in the form of sodium. When water, sodium and other electrolytes are not replaced, heat transfer is impeded, body core temperature rises and the stage is set for heat illness.

There are varying degrees of heat disorders - **heat syncope** is the least serious.

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Syncope involves fainting, usually due to an improper cool-down and is easily treated by having the person lie down in the shade with their legs elevated and drink cold fluids. **Heat cramps** affect the legs and abdomen. The cause is usually due to sodium loss during sweating. Treatment of heat cramps involves rest, cool-down, muscle massage and sodium replacement via a sports drink. The remaining heat illnesses are very serious and require medical attention. **Heat exhaustion** is characterized by thirst, headache, nausea, dizziness, fever (102°-105°), vomiting, fatigue and impaired judgment. While arranging transportation to the hospital, have the person rest, cool-down and drink cold fluids. At the hospital, they will be able to monitor sodium level during rehydration. **Heat stroke** is the most severe case of heat illness. Characteristics include hot, flushed skin, confusion, rapid heartbeat, shallow breathing, high fever (>105°) and the victim may become unconscious. This is a very serious emergency! CPR may be necessary. Immediately transport to an Emergency Room.

So, how do you prevent heat illness? Drink plenty of fluids. Stick with water or sports drinks and avoid caffeine because of its diuretic effect. You should drink a full quart per hour, but don't ever exceed 1.5 quarts per hour. Why? Because you can bring on a condition known as hyponatremia. This condition occurs when sodium is lost through sweating and the over-hydration dilutes what sodium remains in your blood. Hyponatremia symptoms may resemble heat exhaustion or heat stroke, except that the body temperature won't rise. Hyponatremia can result in seizures, coma and even death.

When it comes to heat illness, prevention should be stressed. Educate your people, watch for symptoms and intervene early. Be sure to know your heat illness plan before you need it.

Stay Cool & Keep Our Summer Activities Safe

CAP Safety Metrics

	FY03	*FY04*
Aircraft Accidents	***5***	***4***
Aircraft Incidents	***38***	***21***
Fatalities	***2***	***3***
Vehicle Mishaps	***16***	***6***
Bodily Injuries	***13***	***8***
Serious Injuries	***2***	***5***

Bird Strikes

Bird and other wildlife strikes to aircraft annually cause over $600 million in damage to U.S. civil and military aviation. Furthermore, these strikes put the lives of aircraft crew members and their passengers at risk - over 195 people have been killed worldwide as a result of wildlife strikes since 1988.

Last month, CAP experienced two bird strikes; one in Texas that damaged a wing and another in North Carolina that dented the vertical stabilizer. Both occurred at approximately 1000'.

Bird strike facts:

- Over 5,900 bird strikes were reported for U.S. civil aircraft in 2003.
- An estimated 80% of bird strikes to U.S. civil aircraft go unreported
- Waterfowl (32%), gulls (28%), and raptors (17%) represented 77% of the reported bird strikes causing damage to U.S. civil aircraft, 1990-2003
- Most bird strikes occur in the approach phase of flight.
- Most bird strikes occur during the day, but nearly as many occur at night.
- The most dangerous months for bird strikes are July through October.

Other Safety Meeting Topics

- **FAA Online Bird Strike Info and Reporting:** http://wildlife-mitigation.tc.faa.gov/public_html/index.html
- **Safety Posters from the USAF Safety Center (AFSC):** http://afsafety.af.mil/AFSC/posters/postermenu.htm
- **15-Passenger Van Safety:** http://www.nhtsa.dot.gov/cars/problems/studies/15PassVans/15PassCustomerAdvisory.htm
- **Sun Safety:** http://www.sunsafety.org/